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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,123	01/03/2002	Hiroyuki Shinozaki	000859A	1034

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EXAMINER

LAM, THANH

ART UNIT PAPER NUMBER

2834

DATE MAILED: 07/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/034,123

Applicant(s)
Shinozaki

Examiner
Thanh Lam

Art Unit
2834



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-10 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5, 6, 9, and 10 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/600,116.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 6) ☐ Other:

Art Unit: 2834

DETAILED ACTION

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119 (a)-(d). The certified copy has been filed in parent Application No. 09/600,116, filed on 02/12/1998.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5-6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior art (fig. 1-6) in view of Sawicki.

The prior art discloses a method for controlling a magnetic bearing device comprising: detecting a position of a levitated body by a status detector unit, which uses a modulated signal of a certain fundamental frequency; and levitating said body at a predetermined position by magnetic force generated by an electromagnet.

Sawicki disclose eliminating frequency components of a frequency area around a fundamental frequency for the purpose of eliminating distortion frequency of the signal (col. 2 and lines 40-45).

Art Unit: 2834

It would have been obvious to one of ordinary skill in the art at the time the invention was made utilize the method for controlling a magnetic bearing device of the prior art and combine with the eliminating frequency components of a frequency area around a fundamental frequency as disclosed by Sawicki for the purpose of eliminating distortion frequency of the signal (col. 2 and lines 40-45).

Regarding claim 6, the proposal in combination of Prior and Sawicki disclose said electromagnetic bearing device has a power amplifier unit for supplying controlled current to said electromagnet, said controlled current being pulse width modulated; and a signal amplifier unit for amplifying signal before inputting to said power amplifier.

Regarding claim 9, the proposal in combination of Prior and Sawicki disclose said status detector is an inductance type displacement sensor.

Regarding claim 10, the proposal in combination of Prior and Sawicki disclose said eliminator is a band eliminator filter.

Allowable Subject Matter

4. Claims 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 7-8 prior art fails to disclose the specific arrangement of the eliminator that is inserted between said signal amplifier unit and said power amplifier unit, or the power

Art Unit: 2834

amplifier unit is provided with a pulse width modulation circuit which comprises a comparator for comparing an input signal with chopper wave signal, and said eliminator is connected at the front end of said comparator.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.

A handwritten signature in black ink, appearing to read 'Thanh Lam', with a stylized flourish at the end.

Thanh Lam

Patent Examiner

July 12, 2002